



### 2.3 Theory of the Firm (Market Structure)

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### 2.3.3 MONOPOLY

- A (pure) monopolist is a sole supplier of the output of an entire industry. It produces a commodity for which there are no close substitutes. Under monopoly, the firm and the industry are one and the same, i.e. the entire industry is controlled by a single seller.
- One may talk about world monopolies such as Debeers (diamond industry), national monopoly in the case of postal services or even local monopoly (the school's drinks stall).

#### 2.3.3.1 Characteristics and Assumptions

##### a) **One seller but many buyers**

- Since there is only one seller in the industry, there is no direct competition and the monopolist is thus in a position to influence the price of the good. His power to set the price is the very essence of the model. The monopolist is said to be a price-setter.
- However, the monopolist may set the price of the good but cannot decide the quantity sold since that is determined by the demand curve. As such, he may either set the price or quantity.
- The monopolist need not have 100% of the market share as long as other firms in the industry are insignificant and the key player remains a price-setter. E.g. Microsoft can definitely be considered a monopoly despite the existence of some alternative operating systems for Windows.

##### b) **Unique product**

- There are no close substitutes for the product sold by the monopolist.
- The introduction of any close substitute could break the monopoly. E.g. the introduction of M1 broke Singtel's monopoly in the telecommunication industry.

##### c) **Formidable barriers to entry**

- Firms cannot enter the industry. Those barriers to entry may be natural or man-made. They keep potential competitors out of the industry.

#### 2.3.3.2 Types of Barriers to Entry – How Monopolies arise.

##### a) **Lack of availability of inputs**

- Market power can be created through exclusive ownership of any resource. Today, the Debeers Company of South Africa has a monopoly power over the sale of diamond.

##### b) **Administrative / Legal Barriers**

###### i) Government regulations & exclusivity agreements

- Monopolies of various kinds are sometimes established either because the government grants monopoly power by issuing licenses or exclusive franchises. The government itself may claim the right to provide certain products by outlawing competitors too. E.g. Prior to 1997, SingTel had the exclusive rights to operate network and sell equipment in mobile telecommunication.

###### ii) Patents and copyrights

- An important class of legal impediments to entry is patents. To encourage inventiveness, the government gives exclusive production rights for a period of time to the inventor of certain products. As long as the patent is in effect, the firm has a protected position and is a monopoly. Example: Xerox had for many years a monopoly in plain paper copying (Xerox is now no longer in this enviable position).

- Copyright refers to the legal right to control all possible ways of producing a copy of an original piece of work, such as, a book, play, film or piece of music.

c) **Brand and Image**

- A strong brand name makes demand for the product very price inelastic, making substitution difficult and it would take much effort on the part of new comers to compete to win over the customers.

d) **Problem in raising adequate capital (High set-up cost)**

- Certain industries require a large initial capital investment. Such huge fixed costs are generally for expensive machines necessary to the production process.
- Advertising can operate as a potent entry barrier by increasing the setup costs of new entrants. Where there is much effective brand-image advertising, a new firm will have to spend a great deal on advertising its product in order to bring the product to the public's attention. A new entrant with small sales but large set-up costs finds itself at a substantial cost disadvantage relative to the established firm.

e) **Economies of Scale - decreasing average costs for an industry.**

- When a firm gets into the market ahead of others, it might be able to expand and reap economies of scale. It would be able to charge a lower price than its rivals. It would eat into the market share of its competitors who are forced to cut back production and shut down plants. Not able to compete, rival firms continue to lose sales until they leave the industry. The monopoly remains the only seller in the industry.
- Such industries that face falling average cost over the relevant output range are known as natural monopolies, e.g. the public utilities industries like water and electricity. Competition would be wasteful since it requires the duplication of expensive distribution networks. The minimum efficient scale of operation is large.
- A natural monopoly results when the industry's demand conditions are such that only one firm can operate at the minimum efficient scale. In these circumstances if a second firm enters the industry, it could not achieve sales large enough to obtain costs that are competitive with the existing firm.

f) **Technical Superiority**

- A firm whose technological expertise vastly exceeds that of potential competitors can, for a period of time, maintain a monopoly position. Eg, IBM for many years had little competition in the computer business mainly because of its technological superiority.

g) **Predatory pricing**

- The existing firm can cut prices to cost level or even below cost whenever entry occurs and keep them there until the new entrant goes bankrupt.

### 2.3.3.3 Demand and Revenue Curves for Monopoly

- Here we confine ourselves to a monopolist that charges a single price for all units he sells. That is, there is no price discrimination.

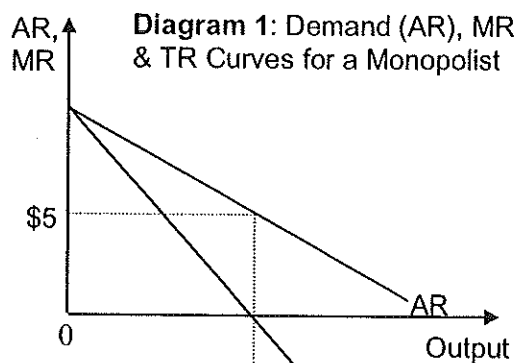
a) **Demand curve**

- As the monopoly is the only producer, it is the industry. Thus, the industry's demand curve, which is downward sloping, is the monopolist's demand curve.

- b) **Average Revenue Curve**
- Since price = AR, the market demand curve is also the AR curve.
- c) **Marginal Revenue Curve**
- MR is less than AR (price) because the firm has to lower the price it charges on all units in order to sell an extra unit. Therefore, the MR curve lies below the AR curve.

**Table 1:**

Price (P) (\$) AR = P	Quantity (Q)	Total Revenue (TR = P x Q) (\$)	Marginal Revenue (MR = $\Delta TR / \Delta Q$ ) (\$)
\$10	0	0	-
8	1	8	8
6	2	12	4
4	3	12	0
2	4	8	-4



**Note:**

Whenever  $MR < AR$ , the MR line will always bisect any horizontal line between the vertical axis and the AR (DD) curve. That is, the slope of MR curve is 2 times as steep as that of AR curve.

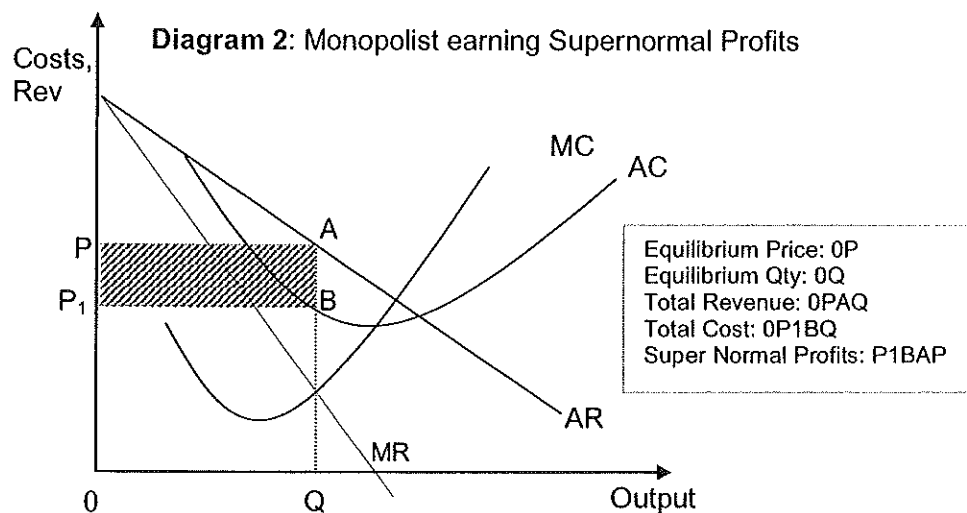
**2.3.3.4 Price and Output Decisions of a Monopolist**

- Since the monopolist's demand curve is downward sloping, it means that he has to reduce price if he wants to sell more and if he wants to raise price, he has to reduce output. Thus, he can choose the price or quantity but he cannot control both price and quantity. He cannot force people to buy his good.

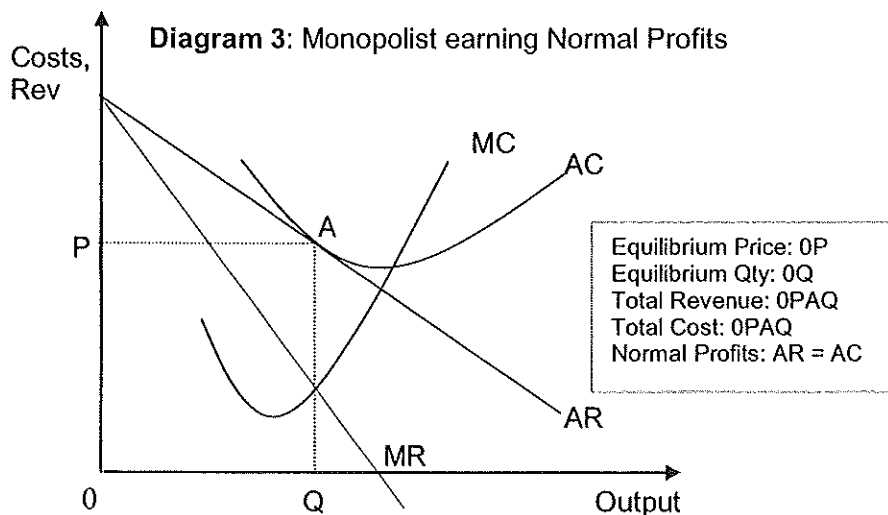
a) **Profit Maximizing /Loss Minimizing Equilibrium**

- To maximize profit or minimize losses, the monopolist will produce at the output where  $MC = MR$  (and MC curve cuts MR curve from below).
- In the short-run, the monopolist can be in equilibrium earning supernormal profits, normal profits or incurring losses.
- In the long-run, the monopolist can earn supernormal or normal profits but not incur losses. The monopolist would rather shut-down then suffer losses.
- In some rare case, a monopolist may remain in business even if it incurs losses, at the request of the government. E.g. medical services, telecommunications...

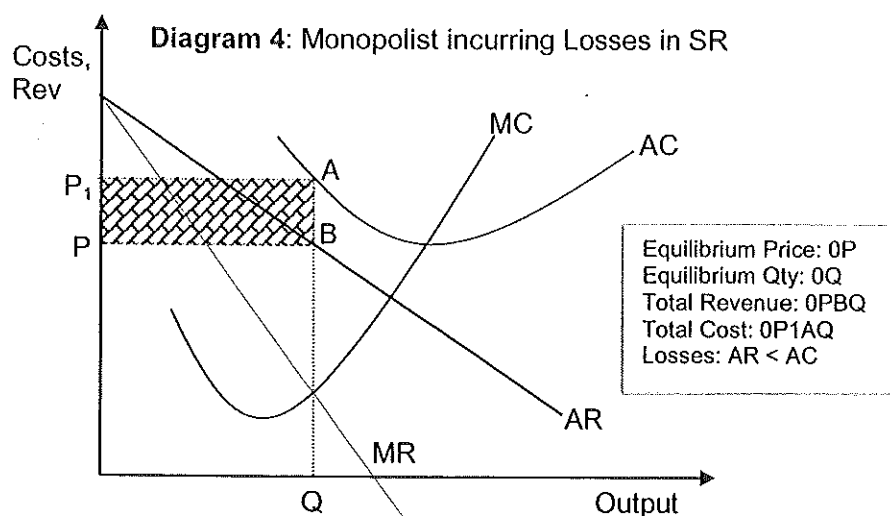
b) **Monopolist earning Supernormal Profits in SR**



c) **Monopolist earning Normal Profits in SR**



d) **Monopolist incurring Losses in SR**



**Derive the following cases on your own, with the aid of diagrams.**

- Loss making monopolist with  $TR > TVC$  or  $AR > AVC$
- Loss making monopolist with  $TR = TVC$  or  $AR = AVC$
- Loss making monopolist with  $TR < TVC$  or  $AR < AVC$

**Note:**

- A monopolist has excess capacity since the equilibrium output is less than the output at the lowest SRAC regardless of its equilibrium positions.
- If the monopolist makes supernormal profits in the short-run, it can continue making such profits even in the long run because of formidable barriers to entry. Such profits are sometimes called monopoly profits or monopoly rents. In the long-run, price must at least cover AC for the firm to remain in the industry. As stated earlier, the firm will usually shut down in the long-run when it suffers losses.

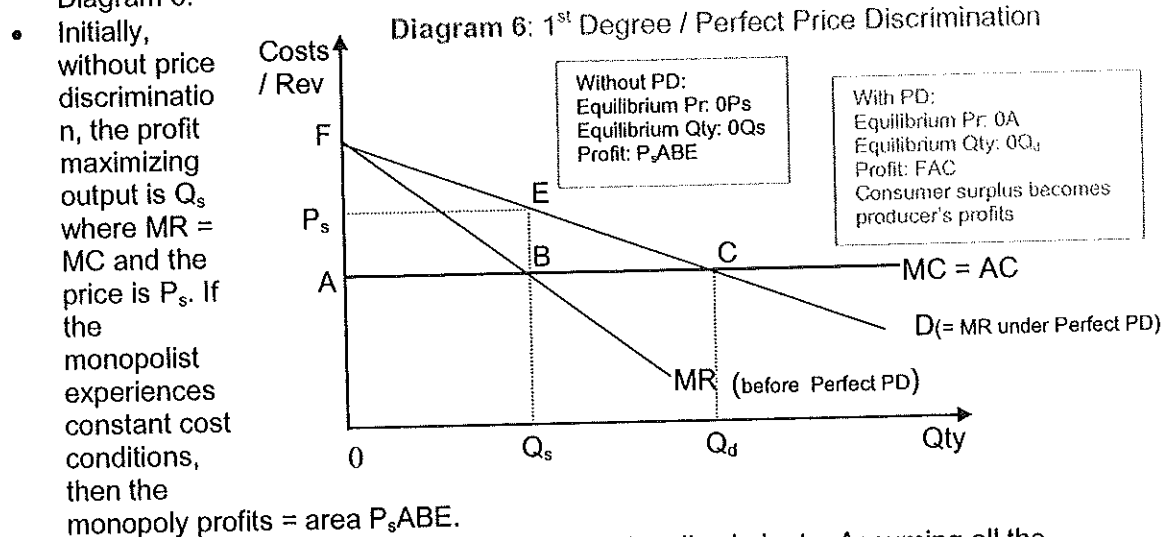
**2.3.3.5 Price Discrimination**

- Price discrimination occurs when a producer sells the same commodity at different prices, for reasons not associated with differences in cost. If price differences reflect cost differences (e.g. due to higher transport costs to remote areas), they are not discriminatory. Price discrimination will benefit a firm if it increases the firm's total profits.
- Motives of A Price Discriminator**
    - to increase profits
    - to gain access to foreign markets.
  - Three Conditions necessary for Successful Price Discrimination**
    - The firm must have some market power. That is, it can set prices and is not a price taker.
    - The firm must be able to separate the markets and prevent resale.
      - There are many ways to separate markets by:
        - gender – ladies' night at social clubs where women need not pay entrance fees.

- income – Water and Electricity rates are higher for residents of condominium and landed properties in Singapore.
- age – bus company charging different prices for students, aged and adults.
- geography – a manufacturer sells cars in the export markets at a lower price than in the home market. (Dumping)
- usage – Singtel charges lower rates to heavy users or beyond a certain usage (the greater the consumption, the lower the willingness to pay for additional units of the good – satiation).
- time – Telecommunications companies charging different prices for peak & non-peak hours
- If buyers are able to resell the goods in the other market(s), in the long run, one price would prevail and hence the monopolist cannot discriminate any more.
- iii) The price elasticity of demand in the separate markets must differ.
  - The market with the lower price elasticity of demand will be charged a higher price compared to the market with a higher price elasticity of demand.

c) **Perfect Price Discrimination (1st Degree Price Discrimination)**  
(Constant costs are assumed)

- This is an extreme case where the monopolist is able to charge the maximum price each customer is willing & able to pay for each additional unit bought. This is shown in Diagram 6.

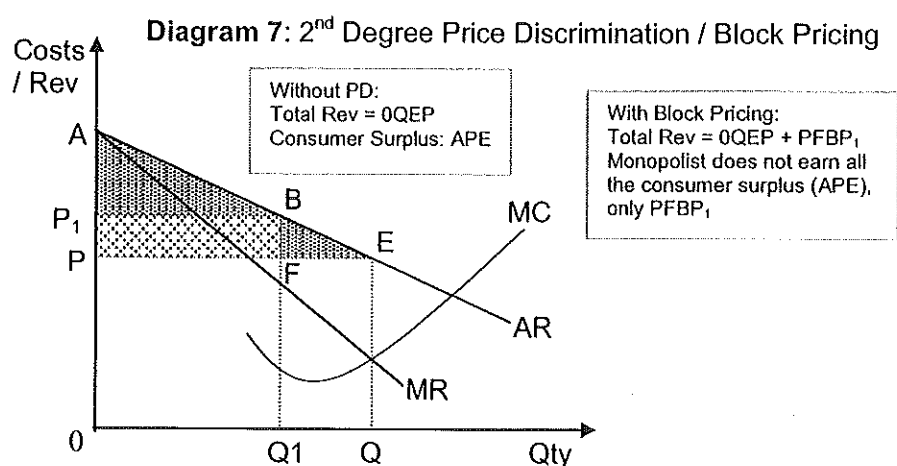


- Initially, without price discrimination, the profit maximizing output is  $Q_s$  where  $MR = MC$  and the price is  $P_s$ . If the monopolist experiences constant cost conditions, then the monopoly profits = area  $P_sABE$ .
- Now suppose the monopolist can perfectly price discriminate. Assuming all the conditions necessary for price discrimination are present, the monopoly will charge the buyer the maximum price that he is willing to pay for each unit of the good. For example, a consumer may be willing to pay \$10 for the first unit of a good, \$9 for the second unit and \$8 for the third unit. All the points on the demand curve represent the maximum price that the buyer is willing to pay for the additional units of the good. The price is equal to the MR received from each extra unit sold. Hence, under perfect price discrimination, the demand curve is also the MR curve. The monopolist will produce the output level where MR (which is now the same as demand curve) equals MC.

- As a result of perfect price discrimination, the monopolist is now able to sell a larger output  $Q_d$  (compared to  $Q_s$ ) and make more profits. The monopoly profits is now equal to area CFA that is greater than  $P_sABE$ . The consumer surplus is now zero.

d) **2nd Degree Price Discrimination**

- The monopolist could charge 2 different prices:  $P_1$  for the first 10 units and  $P$  for the next ten units (2nd degree price discrimination / block pricing). The consumers' surplus is reduced from PAE (without price discrimination) to the shaded areas shown in the Diagram 7. The loss of consumer surplus is the rectangle PP<sub>1</sub>BF.



**Note:** The total profit has risen as total revenue increases while total cost remains unchanged.

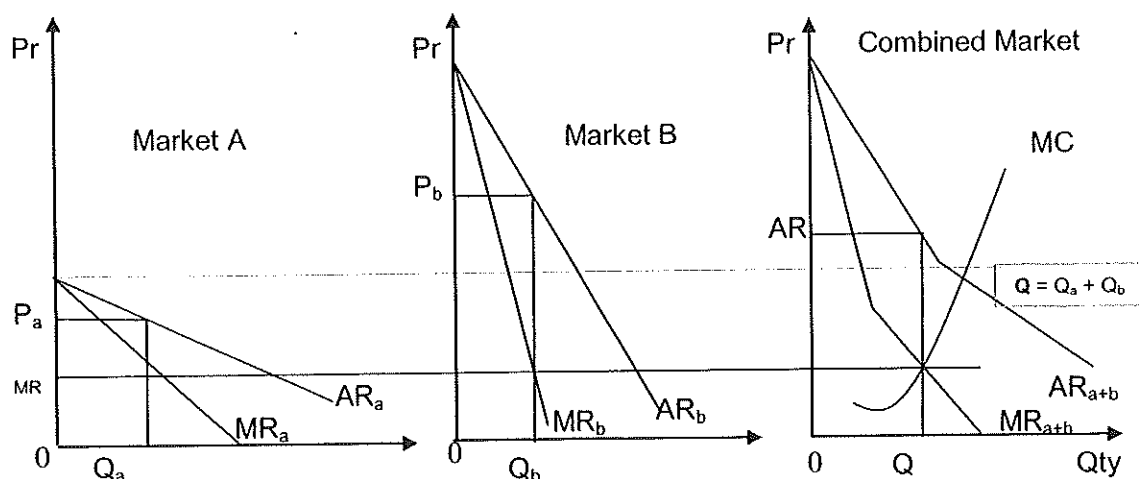
e) **3rd Degree Price Discrimination**

**Price & Output Decisions of a Price Discriminator**

- Suppose that a monopolist is faced with 2 markets, A and B. In order maximize his profits, he will have to decide:
  - the total output he would produce
  - how to divide this output between the 2 separate markets and
  - what price to charge in each market.



**Diagram 8: 3<sup>rd</sup> Degree Price Discrimination**

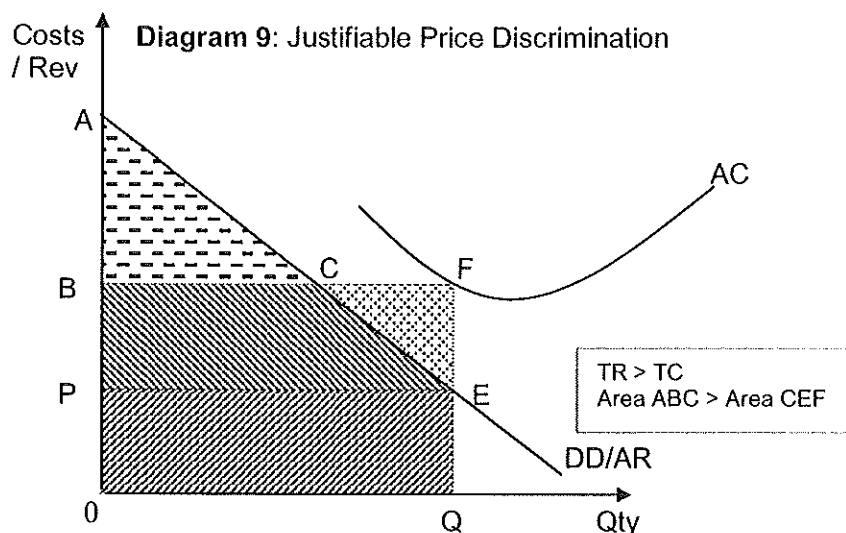


- i) Determination of the total output
  - Since the monopolist is selling a single product, he must consider the MC of the whole output irrespective of which market the product is sold in. He will equate this MC to the combined MR ( $MR_{a+b}$ ) of the 2 markets. So the monopolist's total output will be at OQ (20 units) where  $MC = MR$ .
- ii) Division of the total output between 2 separate markets
  - The monopolist will maximize profits by equating the MC of the total output with the MR in market A, that is,  $MR_a$  and the MC of the total output with MR of market B. He will therefore sell  $OQ_a$  (12 units) in market A and  $OQ_b$  (8 units) in market B.  
**Note:**  $OQ = OQ_a + OQ_b$
- iii) Determination of the price in each market
  - In market A, demand is more price-elastic (consumers are less willing to pay more for the product), while in market B, demand is less price-elastic (consumers are willing to pay more for the product), the monopolist discriminates by charging  $OP_a$  in market A and  $OP_b$  in market B.
- iv) Extra profits gained
  - Total revenue is higher when the monopolist practises price discrimination. Since the total cost of producing output OQ is the same whether there is discrimination or not, profits is increased with discrimination.
  - The increased profits also comes about when the monopolist is able to sell to another market (a) which it would not have been possible had he charged a non-discriminating price P (no one in market A is willing to pay that price).
- f) **Positive & Negative Aspects of Price Discrimination**
  - i) For any given level of output, the more profitable system of discriminatory prices will provide higher total revenue to the firm than the profit maximizing single price.
  - ii) Output under price discrimination will generally be larger than single price monopoly.
  - iii) The term 'discrimination' seems to suggest that consumers are exploited in

order to increase the profits of the monopolist. This is not necessarily true all the time because price discrimination could be in the interest of the consumers.

**Price discrimination is in the interest of consumers if it helps to cover costs.**

- A product that many people want to buy may have a demand and cost structure such that if a single price were to be charged, the firm can never cover total costs and will not produce any output. However, if the firm is allowed to practise price discrimination, it may then cover total cost and may even make profits. This is shown in Diagram 10.



Referring to diagram 9,

- At output Q, total cost > total revenue. Loss (PBFQ) is incurred at the single price P.
  - If the monopolist could discriminate perfectly between buyers, total revenue (area OAEQ) is greater than total costs (OBFQ).
  - Profits are made because area ABC > area CFE. If the seller is not allowed to price discriminate, government subsidy is needed for continued existence of the firm.
- iv) Price discrimination is also in the interest of consumers if it makes it possible to supply a particular market, which hitherto was not possible (as in 3<sup>rd</sup> degree P.D.).
- Consider a railway company (e.g. the British Rail). If every passenger pays a standard rate per km, then the branch lines would be unprofitable. Only the main line services would be provided because they are profitable. A policy of equitable fares for every one would mean that the branch lines would be closed.
  - Similarly a doctor should be allowed to price discriminate. If he charges every patient (rich and poor) the same, the poor patients would be deprived of his services.
- v) At the micro level, price discrimination could be perceived as being unfair especially if the consumer discovers that he / she has paid a higher price for the same good solely due to his / her higher income as compared to another consumer.

### 2.3.3.6 Cons and Pros of Monopoly

#### a) The Case against Monopoly

##### i) A monopoly's profit persists

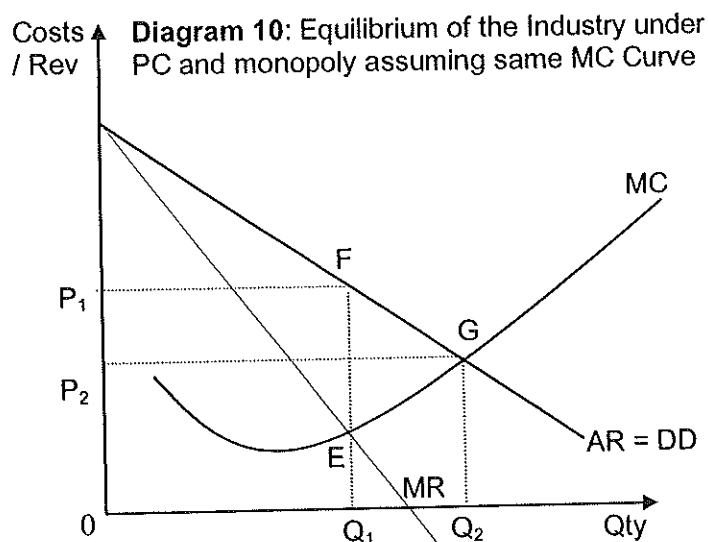
- The existence of barriers to entry makes it possible for the monopolist to earn supernormal profits even in the long run.
- Such accumulation of wealth would be objectionable if the monopolist does not pass such profits to the consumers in terms of R & D to develop better products and to bring about lower prices.

##### ii) Allocative inefficiency

Diagram 10 compares the profit maximizing position for an industry under monopoly with that under perfect competition.

Referring to diagram 10,

- The monopolist will produce  $Q_1$  at price  $P_1$ , where MC cuts MR.
- However, a perfectly competitive industry would produce  $Q_2$  at price  $P_2$  - a higher output and a lower price. The firm under PC equates price to MC, as compared to a monopolist, where  $P_1 > MC$ . It produces less of the good than what the society wished for.
- The perfectly competitive industry thus achieves allocative efficiency whereas the monopolist produces below the optimal level of output.



##### iii) Productive inefficiency

- In the long run under PC, complete freedom of entry eliminates supernormal profit and forces firms to produce at the bottom of their LRAC. The effect is therefore to keep long run prices down and productive efficiency is attained.
- Under monopoly, however, barriers to entry allow profits to remain supernormal in the long run. The monopolist is not forced to operate at the bottom of the AC curve. The long run prices are likely to be higher and output will be lower. (Refer to Diagram 10)
- Since the monopolist is not productive efficient, it is producing under conditions of excess capacity.

##### iv) Complacency

- Perfect competition forces each firm to be efficient or perish. Each firm strives to keep pace with the latest developments so as to survive in the industry. Under monopoly, these pressures are weak. Lack of competition often leads to inefficiency and lessened the need to meet consumer needs.

v) Political Domination

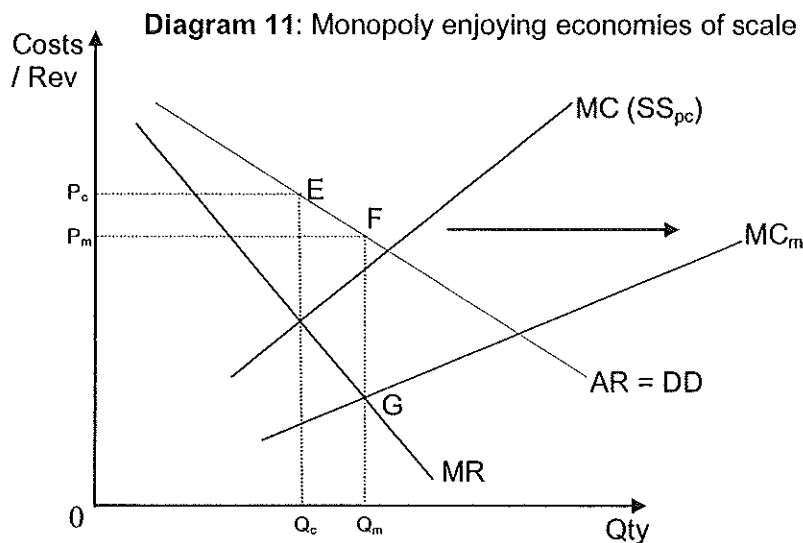
- If a monopoly is a major contributor to the economy of a country (in terms of employment for example), it may exert power on the ruling political party.

b) The Case For Monopoly

i) Internal Economies of Scale

- The analysis in diagram 10 was based on the assumption that both market structures (perfect competition and monopoly) operate on similar cost conditions. However, it may be more realistic to expect the monopolist's cost to be lower.
- In certain industries, internal economies of scale can be exploited, for example, managerial and financial economies. If so, a monopolist meeting the entire industry's demand would be more efficient than if the industry were broken up into many smaller firms. In such cases, it may be in the society's best interest to allow the monopoly to exist so that consumers can benefit from the economies of large-scale production. However, it may be necessary to place legal limitations on the monopoly's ability to control price.
- As reflected in diagram 11, the lower marginal cost due to economies of scale would allow the monopolist to charge a lower price and produce a higher quantity than what would be achieved if the industry was perfectly competitive.

- If the industry becomes monopolistic and it reaps internal economies of scale, then MC would fall to  $MC_m$ . The monopoly equilibrium output will be  $Q_m$  with the price at  $P_m$ . In this situation price will be lower and output will be greater than under perfect competition (under perfect competition, output is  $Q_c$  and the price is  $P_c$ )



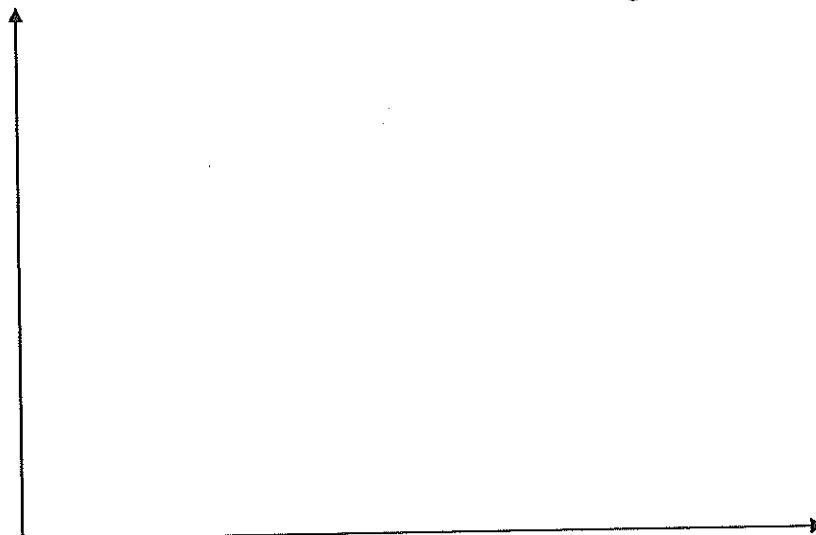
- The consumers would benefit if continuous economies of scale mean cheaper goods.

ii) Special Case: Natural Monopoly

A natural monopoly occurs when a market is not large enough to allow more than one firm to take full advantage of economies of scale. It is often the case that there are substantial economies of scale available, for example, in the electricity transmission and water industries. Therefore, average production cost would be higher if more than one firm operated in the industry. Consumers would suffer due to higher prices.

Can you think of more examples of natural monopoly? Draw a diagram in the space below showing a natural monopoly:

Diagram 12. A Natural Monopoly



iii) Monopoly may aid innovation

- Industry today is becoming increasingly technological and scientific oriented and to have further innovations would involve enormous sums of money for expensive research and development (R&D) programmes. Monopolies are innovators, developing new products through R&D programmes that only monopoly profits can finance.
- Furthermore, it has greater incentives to invest in R&D because it is protected from rivals and therefore, sure to capture the benefits from any cost savings it can devise. For example, ballpoint pens and antibiotic drugs were initially produced by monopolists and sold at high prices. Over time, patents lapse, competition erodes monopoly profits and brings prices down.

iv) Greater Stability

- The large monopoly firm may be better placed to bear a period of adverse business conditions because it can fall back on its large reserves (accumulated profits). So it does not need to reduce employment of factors of production and output. This is in the public interest.

v) Less advertising expenditure

- Because monopolist does not have to worry about competition, it incurs less advertising expenditure. The consumers benefit if this results in lower product price.

### 2.3.3.7 Control of Monopoly (applies to ALL monopoly)

a) Intervention strategies are used by the government to:

- encourage monopolies to use better methods of production that would lower prices.
- reduce power of monopolies to create artificial scarcity. Scarcity is artificially created when monopolies reduce quantity produced to raise price.
- to redistribute wealth from monopolists to consumers.
- to reallocate resources more efficiently.

There are three basic policies the government can adopt towards monopolies:

**b) Prohibition**

- The formation of monopolies can be banned and existing monopolies broken up. This is basically the attitude in the USA. 'Anti-trust' legislation in the USA dates back to the Sherman Act of 1890.

**c) Takeover / Nationalization**

- The government may take over the monopoly completely and run it in the public interest. The industry becomes nationalized. Nationalized industries do not aim to maximize profits. Reasonable prices are usually charged for the services produced. The state-owned monopolies (which are usually also natural monopolies) may practise AC pricing or MC pricing.
- Governments may takeover a natural monopoly in order to:
  - prevent monopoly pricing by natural monopolies producing essential goods e.g. Public utilities. Such natural monopolies can jack up prices, earn enormous monopoly profits and do not produce at the point where  $P = MC$ .
  - provide adequate service at reasonable prices, i.e., everyone including the poor, has access to the services / good. The poor may pay a lower rate. These rates could be less than AC. However the rich may be charged higher rates (more than AC). Government could practice price discrimination.

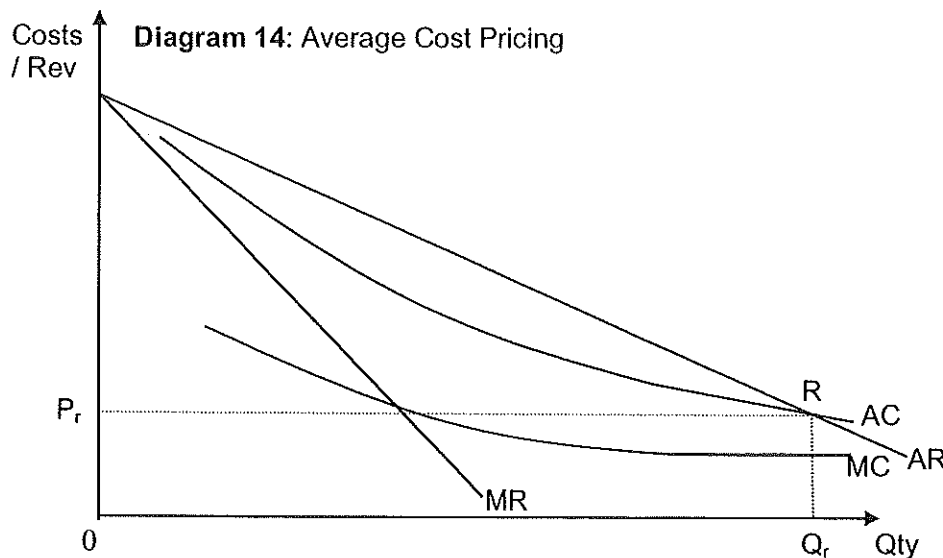
**d) Government Regulation**

- Rules and regulations governing the operations of monopolies may be set. Government allows private monopolies to continue but passes legislations to make sure that they do not act 'against the public interest'. Usually they are required to practise certain pricing policies.



iii) Average Cost Pricing

- If the state does not wish to subsidize the firm it may impose AC pricing. The effect is shown in Diagram 14.



- A state-owned monopoly could charge a price just high enough to cover average cost ( $P = AC$ ). The price is set at the point where demand curve cuts AC at point R with output  $Q_r$  and price  $P_r$ .
- The advantages of AC pricing include:
  - Monopoly profits are wiped out ( $TR = TC$ ). Many would feel that it would result in a more equitable distribution of income.
  - Firm makes normal profit and can therefore continue production in both short run and long run. Normal profit is considered a 'fair rate of return'. There is no need for government subsidy as in MC pricing.
  - Society gets a larger quantity of goods at a lower price.
- The drawback of such a policy is resources are inefficiently allocated. At  $Q_r$ , price is still greater than MC (although the gap between  $P$  and MC is smaller compared to unregulated monopoly). There is still not enough of the good being produced.



### 2.3.3.8.1 NATIONALISED INDUSTRIES

Nationalised industries are state-owned industries that produce goods or services that are sold in the market. Nationalisation usually covers a wide range of industries such as gas and electricity, coal, rail, some road transport (bus) and iron and steel.

#### ARGUMENTS FOR NATIONALISATION

Nationalisation is often seen as a solution to market failure. Advocates of nationalisation argue that problems of externalities, inequality, etc can be dealt with directly if these industries are run in the public interest, rather than private gain.

#### **1. Improve efficiency**

- i. by correcting externalities

Private firms will only take into account their private benefits and private cost when making decisions. They aim to maximise profits (i.e. net private benefits). Thus, the output they produce may not be socially efficient.

For example, running a railway service gives rise to substantial external benefits because it may ease congestion on the roads on top of benefiting rail users. Such externalities would mean that if left to the private producers, rail service will be underprovided. Nationalisation, on the other hand, ensures that the social optimum level of output is produced.

- ii. by enjoying cost savings as a monopoly

In many countries, state-owned enterprises producing output such as iron and steel, gas and electricity are monopolies. They usually enjoy economies of scale arising from large-scale production. In addition, a state owned industry could usually obtain funds more cheaply than a private firm. Without competition, monopolies do not need to incur unnecessary competitive advertising costs, thus promoting efficiency.

#### **2. Attain equity**

In the real world, income is unevenly distributed and it is argued that certain essential services (eg. transport and utility) should be made affordable to the entire population.

#### **3. Political reason**

There are certain industries eg. iron and steel, coal and power which are very strategic to economic development. These key industries are best run by the state in the general interest of the nation.

### 2.3.3.8.2 PRIVATISATION

Privatisation is the sale of state-owned assets to the private sector.

Privatisation can also take the following forms:

#### 1. *Privatisation of production*

Privatisation of production entails the purchase rather than the production of goods and services by the government – jobs previously performed by the public sector are now contracted out to the private sector. E.g., the Ministry of Environment has leased out government contracts for refuse collection to the private sector.

#### 2. *Liberalisation or deregulation*

Where competition by and in the private sector is encouraged through the relaxation or removal of government regulations – results in the creation of a more competitive environment and a proper price mechanism.

### ARGUMENTS FOR PRIVATISATION

Privatisation has been seen by many governments as a means of revitalising inefficient industries and as a golden opportunity to raise revenues to ease budgetary problems.

#### 1. *Lower Costs*

Nationalised industries have no incentive to produce at the lowest cost as they are not motivated by profits. Moreover, the public sector employees will not be sacked if costs are high. Thus, there is likely to be x-inefficiency. A privatised profit maximising company have an incentive to reduce cost because reduced cost is translated into higher profits. Hence privatisation leads to greater productive efficiency.

#### 2. *Greater Choice, Better Quality*

Public sector organisations have little incentive to produce good quality goods or goods which consumers want to buy. They tend to mass-produce a limited range of goods and services. Many are monopoly producers and therefore, consumers have to buy from them whether they like it or not.

In the private sector, there is an incentive to provide choice and quality goods. When they are monopolies, privatised firms can raise price and expand their market by providing quality goods with variety. Higher price and greater sales can then lead to higher profits, the motivation of privatised firms. If they are in competitive markets, competition will drive companies that fail to provide the goods consumers want to buy out of business, strengthening the need to provide quality goods.

#### 3. *Greater Innovation*

The lack of competition and the need to make profits means that state organisations have no incentive to innovate. Privatised monopolies, on the other hand, can earn higher profit if

they innovate and expand their consumer base. The desire to innovate would be even stronger if potential competitions exist to threaten the monopoly's position. This increases dynamic efficiency in the economy.

#### **4. Efficient Resource Allocation**

Market forces allocate resources so that they are used in the most efficient manner. Consumer spending decisions in a free market indicate consumer preferences. Public monopoly, on the other hand, lack knowledge of consumer preferences to make efficient allocative decisions on their behalf. Moreover, government may interfere in the market and misallocate resources for political reasons. Privatisation frees the firm from such constraints and allows it to make rational economic decisions. The operation of free market forces will ensure the optimal allocation of resources.

However, this market forces argument for privatisation largely breaks down if a public monopoly is simply replaced by a private monopoly. There is no competitor to whom the consumer can switch. At least when nationalised, the company was not out to make profits and thereby exploit the consumer. The monopoly has less need to rely on efficiency to make profits. It can make large profits for its shareholders simply by raising prices. In such cases, the interests of shareholders will be in conflict with the interests of consumers.

#### **5. More robust private business sector**

A big public sector 'crowds out' private entrepreneurship. Privatisation encourages a robust local business sector which will generate and attract greater investment from both domestic and foreign sources.

#### **6. Reduction in public borrowing and state spending**

In the short term, the sale of state-owned assets raises money for the government, which can be used to reduce public borrowing or even pay off national debt. In the long term, state finances can be improved, as is often the case, state owned enterprises are inefficient, make losses and need to be subsidised.

#### **References :**

Ellie Tragakes. Economics for the IB Diploma, Chapter 5.2. Cambridge University Press (2009), p156 – 137.

Blink J & Dorton I. Economic Course Companion. pg 105 – 113, IBO Oxford University Press, UK (2007)

Matt McGee. Economics – In terms of the Good, the bad and the Economist. Chapter 2.3, IBID Press, Australia (2009), p185 – 195 and p200 – 218.

## Appendix

### A monopolist's supply curve?

- A monopolist has NO specific supply curve.
- In monopoly, there is no unique relationship between market price and quantity supplied because the monopolist does not equate MC to price and thus it is possible for different demand conditions to give rise to the same output but to different prices.
- For a monopolist, the profit-maximizing quantity supplied, as determined by the intersection of the marginal cost and marginal revenue, may be the same even though demand curves are different.
- Example, in Diagram 15, suppose demand shifts from DD to DD' in such a way that the new marginal revenue curve, MR' also intersects MC curve at the same equilibrium point. The equilibrium quantity remains unchanged, but the equilibrium price increases to P'. Thus, this diagram indicates that the same equilibrium quantity can be consistent with two prices. Since there is no unique relation between price and output, there is no supply curve for the monopolist.

